

Temporary Rule ☐ Necessary to protect public health, safety or welfare
☐ Compliance with deadlines in amendments to governing law or federal programs
☐ Conferring a benefit

Docket Number: 58-0101-0601

Section	Existing Rule Summary	Temporary and/or Proposed Rule Summary	Summary of Rule Changes Based on Public Comment	Outstanding Issues
006	General Definitions.	Definitions added or revised as necessary for this rulemaking.	This section has been changed. See attached Response to Comments.	None.
007	Definitions for the Purpose of Sections 200 through 228.	Definitions relating to the regional haze rule deleted from Section 007 and moved to Section 006, General Definitions.	No comment received. No change.	None.
107	Incorporations by Reference.	Certain sections of 40 CFR Part 51, Subpart P, incorporated by reference.	This section has been changed. See attached Response to Comments.	None.
204	Permit Requirements for New Major Facilities or Major Modifications in Nonattainment Areas.	Added reference to 40 CFR 51.300(a), regarding national visibility goal.	No comment received. No change.	None.
205	Permit Requirements for New Major Facilities or Major Modifications in Attainment or Unclassifiable Areas.	Added reference to 40 CFR 51.300(a), regarding national visibility goal.	This section has not been changed. See attached Response to Comments.	None.
600	Rules for Control of Open Burning.	Added reference to new Section 667, Long-Term Strategy for Regional Haze.	No comment received. No change.	None.
651	General Rules.	Added the phrase "proximity to mandatory Class I Federal Areas" for consistency with this rulemaking.	This section has not been changed. See attached Response to Comments.	None.
665	New Section.	Regional Haze Rules. Sets out the rule sections (665 through 668) addressing regional haze visibility impairment in mandatory Class I Federal Areas.	This section has been changed. See attached Response to Comments.	None.

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666	New Section.	Reasonable Progress Goals.	No comment received. No change.	None.
667	New Section.	Long-Term Strategy for Regional Haze.	This section has been changed. See attached Response to Comments.	None.
668	New Section.	BART Requirement for Regional Haze.	This section has not been changed. See attached Response to Comments.	None.

DEQ'S RESPONSE TO COMMENTS

Commenter: U.S. Environmental Protection Agency

Comment 1: General comments

Since some of the terms in 006 are also defined in 40 CFR 52.21 and 51.165 (which IDEQ has incorporated by reference), we need a statement from IDEQ that the definitions in 006 do not affect the definitions used for major NSR purposes. This explanation can be submitted with the SIP submittal.

Response: DEQ will submit a statement that the definitions in Section 006 do not affect the definitions used for major new source review (NSR) purposes. Both Sections 204 and 205 explicitly state that the intent is to incorporate the federal prevention of significant deterioration (PSD) and nonattainment NSR rule requirements.

Comment 2: Section 006: General Definitions

43. Federally Enforceable.

This definition needs to be revised to read: All limitations and conditions which are enforceable by EPA the Department under the Clean Air Act, including those requirements developed pursuant to 40 CFR Parts 60, and 61, and 63, requirements within any applicable State Implementation Plan, and any permit requirements established pursuant to 40 CFR 52.21 51.21 or under regulations approved pursuant to 40 CFR Parts 51, 52, or 60. We also recommend that IDEQ include a reference to its Tier II operating permits in the definition of federally enforceable.

Response: DEQ agrees that "EPA" should be added to the definition of Federally Enforceable and has made that change. In addition, the incorrect reference to 40 CFR 51.21 has been changed to 40 CFR 52.21. DEQ added a reference to 40 CFR Part 63. The proposed rule uses the term permit, which could include any of DEQ's air quality permits that contain requirements established pursuant to 40 CFR 51, 52, 60 or 63. Furthermore, Tier II permits are federally enforceable and already in DEQ's state implementation plan (SIP). See 40 CFR 52.681.

Comment 3: Section 107: Incorporation by Reference 03.d

The July 1, 2006 version of the CFR should be incorporated by reference instead of the July 1, 2005 version so that you capture the BART rule that was finalized on July 6, 2005.

Response: DEQ agrees that the July 1, 2006 version of CFR should be incorporated by reference and has made the correction.

Comment 4: Section 205: Permit Requirements for New Major Facilities or Major Modifications in Attainment or Unclassifiable Areas

In the past, IDEQ's NSR rules for attainment or unclassifiable areas included a requirement to consider the effect on visibility (58.01.01.205.01.c [sic] [should be 202.01.c]). When IDEQ repealed its major NSR requirements in 2004 to rely on the Federal NSR requirements, a gap for visibility permitting was created. Therefore, the revision to reinstate the visibility permitting requirements in 58.01.01.205.02 will need to be submitted to EPA before we can act on the NSR Reform submittal from July 2005 (which does not include the requirements for visibility permitting for attainment or unclassifiable areas).

Response: *A gap does not exist under Section 205 for visibility requirements. Sections 202.01.c.v. and vi. contain the visibility analysis required for major sources in attainment or nonattainment areas under 40 CFR 52.21(o). The proposed rule contains additional language to bring in the regional haze program.*

Comment 5: Section 665: Regional Haze Rules

The second sentence states that the intent of section 665 through 668 is to incorporate the federal protection visibility definitions, but aren't the definitions incorporated in sections 006 and 107?

Response: *Yes, the definitions are included in Section 006 and the regional haze program requirements are incorporated by reference in Section 107. Section 665 has been revised to state: "The intent of Sections 665 through 668 is to set forth the requirements to implement the federal programs for visibility protection and regional haze.*

Commenter: Stoel Rives

Comment 6: Section 006

IDEQ did not include three definitions that Stoel Rives recommends be adopted from 51.308. Specifically, "fixed capital cost" "in existence" and "in operation." These may be relevant in individual BART determinations. If omitted, a source can always refer to 51.308, however, it may be more convenient to include them in IDAPA.

Response: *DEQ did not include these definitions as a source can refer to 40 CFR 51.308, and the terms are only used in the BART eligibility determination, which will be completed probably by the time these rules become final.*

Comment 7: Section 006.43

Revise "Department" to "EPA." In order for a limitation to be federally enforceable, this subsection should refer to EPA.

Response: *See Response to Comment 2.*

Comment 8: Section 006.49

Delete this definition because this phrase is not used in IDAPA rules.

Response: *DEQ deleted this definition with the understanding that it may be used in the BART alternative process in Section 668.06.*

Comment 9: Section 006.92

Delete this definition because this phrase is not used in IDAPA rules.

Response: *DEQ deleted this definition.*

Comment 10: Section 665

The second sentence is unclear. Revise to read "The intent of Sections 665 through 668 is to set forth the requirements to implement the federal programs for visibility protection and regional haze."

Response: See Response to Comment 5.

Comment 11: Section 667.01

Insert "...will submit to EPA a long-term strategy..." to clarify to whom the Department will make its submittal.

Response: DEQ inserted the proposed language.

Comment 12: Section 668.03

Please provide an explanation or clarification of this subsection. Particularly what is meant by the phrase "limitations on the applicability of measurement methodology to a particular source."

Response: This language is taken from 40 CFR 51.308.e.iii. It provides the State with some flexibility in determining BART limitations.

Comment 13: Additional comments on the modeling protocol were provided to IDEQ from the Idaho Association of Commerce and Industry on June 8, 2006. Those comments are incorporated by reference into these public comments on Docket 58-0101-0601 and resubmitted for further reconsideration by IDEQ.

Response: The modeling protocol is not part of this rule package; however, it is used to implement the rules. The ID-OR-WA BART Modeling Protocol: Summary of Comments and Responses is attached.

Commenter: Battelle Energy Alliance

Comment 14: Page 111, definition for (43) Federally Enforceable

DEQ is proposing to add the definition "Federally Enforceable" to the general definitions under 58.01.01.006.43. The proposed definition appears to have been taken from 40 CFR 52.21(b)(17), except DEQ has changed the word "Administrator" to read Department. This action would appear to conflict with Section 205.03(a) of the current rule which retains the definition of federally enforceable "Administrator" to mean the EPA Administrator.

If this section is intended to describe DEQ's overall authority for the federally enforceable requirements, shouldn't Part 63 be included in this section?

Response: See Response to Comment 2.

Comment 15: Page 129, 651. General Rules:

DEQ is proposing to add "the proximity to mandatory Class I Federal Areas" as a consideration for the control of fugitive dust. DEQ should establish a threshold distance for proximity to mandatory Class I Federal Areas that would trigger considerations for controlling fugitive dust.

Response: The negotiated rule group discussed at length whether to include a threshold distance to Class I areas as a trigger to include additional controls but decided that such emissions could be reviewed on a case-by-case basis, reviewing factors such as the fugitive emissions sources, control measures available, meteorology, topography, and other technically justifiable factors.

Commenter: Claire Bain

Comment 16: This is a rather asinine regulation considering that much of the poor air quality in summer is either from wildfires in wilderness areas and grass burning. Our air quality is effected more by outside sources year-round then those caused in the Idaho regions in or outside of urban centers. Also consider that the State of Idaho allows farmers to burn 1000's of acres of grass stubble which sickens and kills people annually. I have had an friend here in Sandpoint die from the effects of grass smoke on her system. So these stupid regulations will do nothing until grass burning is outlawed.

In Oregon, farmers can no longer burn grass stubble. They have found other methods to remove stubble and have managed to stay in business profitably. Why do Idaho farmers continue to burn? (because we have always done it that way) or (because we make more money)???? And they burn during the time of year when the air is thick with wildfire smoke...to add insult to injury.

If the EPA and DEQ are serious about air quality or haze in the air, they will first ban grass stubble burning before they begin to force the entire population to adapt to stupid rules about leaf burning or lawn mower engines. Farmers can refer to their fellow grass seed growers in Oregon to figure out another way.

Today the air in Sandpoint is of very poor quality. It's hard to see through burning eyes and the haze of smoke. Much of the smoke is from wildfires in Washington State. It is also a "Red Flag" alert day for extreme fire conditions. I have heard that the farmers have burned fields today, but have not been able to confirm that yet.

Before the above rule is enacted, it is imperative to ban grass field burning in Idaho. No other air quality ruling has any meaning without a ban on grass field burning.

I can't go outside today.....whatever the cause of all the smoke in the air. (for your info, I am not a newcomer, have lived in Bonner County most of my life and have never complained much about field burning. But in light of the DEQ and EPA's attempts to control haze in wilderness by imposing restrictions on everyone but the field burners just makes no sense.....ie: NONSENSE. The grass seed isn't even a food product....it's for lawns and golf courses.....and for that others will have to be sickened and others will die.

Response: *The proposed rule does not affect crop residue disposal so long as it is conducted in accordance with the Smoke Management and Crop Residue Disposal Act and the Crop Residue Disposal rules promulgated pursuant thereto. See IDAPA 58.01.01.617. DEQ will be looking at all sources that impact visibility, including open burning, in the development of the reasonable progress goals. The long-term strategy requires us to address smoke management, which includes crop residue disposal.*

ID-OR-WA BART Modeling Protocol: Summary of Comments and Responses

The BART modeling protocol developed by Washington, Oregon, and Idaho was distributed to BART-eligible sources in the three-state region, the Federal Land Managers (FLMs), and EPA Region 10 in early June 2006. Comments were received in the period up to June 30, 2006. Many comments have been addressed by clarifications or modifications to the protocol, and the protocol is greatly improved with these changes. Significant comments relating to modeling and technical issues are summarized below, together with responses.

Comments Grouped by Topic

General Comments 1: Class I areas and Columbia River Gorge National Scenic Area (CRGNSA).

Comments: The CRGNSA and all Class I areas beyond 200 km should not be included in the analysis.

Response: Inclusion of CRGNSA in the analysis is for information purposes only. The inclusion of all Class I areas within 300 km is based on EPA "Guidelines on Air Quality Modeling" (Section 6.1 of Appendix W).

General Comments 2: Ozone and ammonia backgrounds.

Comments: 1) Provide justification for backgrounds; 2) Use an OZONE.DAT file to allow CALPUFF to choose the ozone concentration at each computational grid point based on the nearest monitoring value; 3) Use monthly or seasonally varying O₃ background; 4) Vary ammonia background by Class I area; 5) Use the ammonia limiting method in POSTUTIL; 6) Use ammonia data from WRAP.

Response: Ozone data in Washington, Oregon and Idaho were analyzed, and an annual background concentration of 60 ppb for domain was determined to be representative. Using varying ozone concentrations for each grid point, including the use of an OZONE.DAT file, is not considered suitable for conditions in the modeling domain. An ammonia background concentration of 17 ppb was determined to be appropriate based on the presence of high ammonia-emitting areas in the three-state region that are not adequately represented in the WRAP modeling. It is recognized that ammonia values may be lower in Class I areas, but the analysis must account for plume transport through ammonia-rich areas. Clarification was added to Section 3.6.3.

General Comments 3: Natural Background and Class I areas.

Comments: 1) Clarify the basis for determining natural background (20% best days or annual average); 2) Provide basis for the 20% best-days natural background numbers that are given in Appendix B; 3) Clarify the use of the alternative method in the EPA Guidance on Developing Natural Background to refine the background values used in the modeling; 4) The natural background is too low (conservative), and should be adjusted to include the contribution of natural carbon and sea salt; 5) Use the new IMPROVE Rayleigh scattering estimates developed in November 2005, instead of the default value of 10; 6) Add the Jarbidge Wilderness area in Nevada to the list of Class I areas in the modeling.

Response: 1) The 20% best days natural background will be used and is consistent with the BART Guideline (Federal Register Vol. 70, No. 128, pf 39125). The protocol was clarified to reflect these comments. The use of the new IMPROVE formula for calculating visibility extinction, including the addition of sea salt, has not been approved by the FLMs for the BART analysis. The new Rayleigh scattering formula will also not be used, which is consistent with FLM recommendations. The Jarbidge Wilderness was added to the Class I area list.

General Comments 4: BART Exemption thresholds.

Comments: 1) Multiple or grouped sources should be compared to the 1.0 dv (“cause” threshold) not to the 0.5 dv (“contribute” threshold); 2) Provide information on how the multi-source analysis will be managed, including data sharing among states; 3) Clarify the use of the 98th percentile dv change versus the highest dv change, and how this metric is linked to the method for estimating natural background; 4) Calculate the change in visibility on a receptor-by-receptor basis, not on the Class I area.

Response: Following the BART modeling guidance, the contribution threshold is 0.5 dv and will be applied to individual sources. In the multi-source assessment, the 0.5 dv value is used only as a marker to indicate that a further analysis of these sources will be carried out; it is not considered a contribution threshold. The additional analysis of these multiple sources will look at the frequency, magnitude, duration, and other factors to determine if these sources, if any, will be considered significant and Subject to BART. Section 2.7.1 has been clarified regarding these multi-source assessments. Emissions and modeled concentration data will be shared among the three states. The 98th percentile change in dv will be used in conjunction with the 20% best days natural background and is based on the EPA BART guidelines and comments of the FLMS. The assessment of visibility change will be based on a receptor-by-receptor basis.

General Comments 5: Multi-source modeling and assessment methodology.

Comments: 1) The reference to FLAG and the use of “magnitude, frequency, duration” in Exemption modeling should be removed as these factors only apply in the Determination phase of the modeling; 2) Clarify the difference between the BART Exemption modeling and Determination modeling; (for example, if a source is determined to be Subject to BART based on the multi-source analysis, should not the BART Determination also be based on group analysis?).

Response: Consistent with the EPA BART Guidelines, the FLAG and IWAQM reports will be used as general guidance for the visibility assessment. The single-source BART Exemption analyses will be based on the 0.5 dv contribution threshold and will not consider the frequency, magnitude, and duration of impairment (consistent with BART Guideline). For the evaluation of multi-source impacts, the BART Exemption analyses will consider an assessment of the magnitude, frequency, duration of impairment, and other factors that affect visibility for each sources in the multi-source group. Section 2.7.2 has been clarified for the Determination phase.

General Comments 6: Inclusion of VOC and ammonia-emitting sources in the BART modeling.

Comments: 1) Remove VOCs and ammonia from the visibility analysis; 2) If VOCs are modeled, justify basis for VOC speciation.

Response: Section 2.3 in the protocol has been modified to read, “Idaho and Oregon have determined that there are no significant sources of VOC, ammonia, or ammonia compounds that require a full BART exemption analysis.” For Washington, “VOC emissions will be included in the BART exemption analysis if the greater-than-six carbon VOC gases exceed 250 tons/year. If speciation is not known, it will be conservatively assumed that 50% of the gas species within the total VOC emissions from a facility have greater than six carbon atoms.”

General Comments 7: Definition of Bart-eligible sources.

Comments: Confusion on definition of BART-eligible source.

Response: Section 2.1 in protocol has been clarified to show that a “BART-eligible source” refers to the entire facility that has BART-eligible emission units.”

General Comments 8: Characterization of facility emissions.

Comment: 1) Clarify under what conditions emission units and pollutants can be excluded in the BART Exemption modeling; 2) Do not include fugitive emissions; 3) Describe how different operating scenarios might be included; 4) Clarify the modeling of HNO₃.

Response: Section 2.4 was clarified on the exemption of pollutants and individual emission units and specifically the exemption of fugitive emissions for sources that are greater than 10km from a Class I area. Different operating scenarios are not addressed in the protocol; if this is a significant issue for an individual source, it will be addressed on a case-by-case basis. HNO₃ modeling is addressed in Section 3.6.1.

General Comments 9: PM speciation.

Comments: 1) Clarify how PM will be speciated, especially the inclusion of the condensable fraction of emissions and scavenging coefficients for PM species; 2) Address the possible double-counting of SO₄ in PM₁₀ condensables with gaseous SO₂; 3) Correct the problem with the speciation references in the appendices; 4) Add additional sources of speciation data than those listed in the appendices; 5) Make reference to the NPS Web site for speciation information.

Response: Section 3.6.1 was modified to give a better description of PM speciation, size fractionation, treatment of condensables, and the modeling of SO₂ and H₂SO₄ to ensure no double-counting. The statement "The states will work with the individual BART-eligible sources to develop appropriate PM speciation and size fractions" was added. Appendix G was removed and three information sources were included in Section 3.6.1. A chart showing the default PM size fractions to be used in CALPUFF was included in the protocol:

<u>Pollutant</u>	<u>Mean diameter</u>	<u>Standard deviation</u>
SO ₄ , NO ₃ , PMF, SOA, EC	0.48	2
PMC	2.5	5

General Comments 10: CALMET modeling.

Comments: 1) The CALMET modeling protocol was not available for public review, yet the work is already under way; 2) Make clear that states, not Geomatrix, is responsible for the protocol for developing the CALMET data set; 3) Correct the years of CALMET data that is shown in section 3.1.2; 4) Clarify how the 12-km CALMET data will be used; 5) Describe how the CALMET data will be provided; 6) Describe how the MM5 will be evaluated.

Response: Clarification was added to Section 3.5. Due to time and resource constraints, an initial CALMET protocol and the development of the data set was started prior to the finalizing of the protocol. The FLMs and EPA were consulted throughout this process, and the initial draft of the CALMET protocol was reviewed and approved before the work began. The years of CALMET data given in the protocol have been corrected. Only the 4-km CALMET data will be used for BART modeling, but both the 4 km and 12 km met data will be available for other air quality analyses. Individual facilities will contact the appropriate state agency to discuss options for obtaining the CALMET data. The MM5 data was evaluated using METSTAT, a publicly available statistical program.

General Comments 11: CALPUFF model versions.

Comments: 1) Clarify reasons for using Version 6 as this is not consistent with other RPO protocols; 2) Correct the listing of versions in the protocol; 3) Update the

protocol and the appendices to reflect the use of Version 6.

Response: Version 6 is the most recent version of CALPUFF and was made available after other protocols in other regions were completed. It was felt important that the most recent version be used, in part because of the improved over-water algorithm. The protocol was corrected to show Version 6 of the CALPUFF modeling system. Appendices were updated to include the new parameters in Version 6.

General Comments 12: CALPUFF modeling parameters.

Comments: Comments on CALPUFF: 1) Clarify the meaning of the phrase “protocol will generally follow FLAG and IWAQM;” 2) Use puff-splitting; 3) Use building downwash; 4) Base source elevations on the same terrain files as the receptor elevations.

Response: The FLAG and IWAQM reports were used as guidance documents during the development of the protocol, and are specifically referenced in the EPA BART guidelines. Puff-splitting and building downwash will not be used in CALPUFF based on the recommendations from FLMs. Clarification was added to Section 3.6.4 to state that source and receptor elevations will be the actual elevations, and will not be based on the DEM data used for the development of the windfields in CALMET.

General Comments 13: CALPOST

Comments: 1) Describe how OC (SOA) is treated in CALPUFF, POSTUTIL, and CALPOST.

Response: Clarification was added to Sections 3.6 and 3.7.

General Comments 14: BART modeling implementation.

Comments: 1) Clarify if the protocol is required for all BART-eligible sources, or can the use of higher resolution met data, or other refined model options, be used to address local conditions; 2) Show the BART schedule, including the estimated time and resources required by IDEQ and WRAP; 3) Describe the process for determining and prioritizing BART control measures, including the sensitivity of the visibility modeling to PM, SO₂, and NO_x emissions; 4) Comment on the observation that control technologies that do not produce visibility improvements will not be determined to be BART.

Response: These local or state-specific issues are not addressed in the protocol, and should be discussed separately with each state agency. In addition, this response to comments is intended only to address the modeling and technical analysis issues of the BART process and not to respond to questions or comments of a legal nature.

Specific Comments

Specific Comment 1: Terminology.

Comment: The term “BART exemption modeling” is not used in the BART Guidelines (40 CFR part 51, Appendix Y). It is suggested that a term that is more directly tied to Appendix Y be used.

Response: The terms in the BART Guidelines are not clear; therefore, the modeling protocol distinguishes between “BART Exemption modeling” (a process to exempt sources from being Subject to BART) and “BART Determination modeling” (a process to determine the level of controls, together with other factors, necessary to meet BART).

Specific Comment 2: Typo

Comment: Put “or” between two bullets in Section 2.4.

Response: The change was incorporated in the protocol.

Specific Comment 3: BART-eligible emission units

Comment: Include a list of all BART-eligible units.

Response: A listing of all BART-eligible units was not included in the protocol as there are potentially a large number of individual emission units, and there may be changes in the actual units included in the modeling as the analysis proceeds. Only a list of BART-eligible sources is included in the protocol.

Specific Comment 4: Model performance evaluation.

Comment: 1) In the protocol, include a section on performance evaluation that addresses the accuracy of the estimated visibility compared to monitored visibility impairment; 2) In the modeling reports, include a summary of a model performance evaluation using the PM₁₀ SIP evaluation as guidance; 3) Describe why the protocol and analysis will not result in an overly conservative result, even as a screening approach.

Response: A section on model performance evaluation was not included in the protocol because it is not appropriate for the type of modeling analysis. In order to complete a model evaluation, several data sets are required covering the same time period: meteorological data, actual emissions data from all source types, and monitoring data. The purpose of the BART analysis is to determine the impact on a Class I area of an individual source or a group of sources. All other emissions that are present in the modeling domain that would contribute to impairment at a monitor are not included in the analysis. As a result, the BART modeled visibility impairment can not be compared to monitoring data. Also, the meteorological data and emissions data must be in the same time period as the monitoring data.

The mesoscale meteorological data (MM5) is being evaluated against actual meteorological observation data as well as the CALMET output files.

The protocol is based on recommendations in the BART Guideline, FLAG report, and IWAQM report. In addition, the BART Exemption modeling approach that is described in this protocol is virtually identical to visibility analyses that have been a part of NSR for sources in the Pacific NW for over five years, and is not considered overly protective of visibility.